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ABSTRACT

Definiteness and indefiniteness are usually seen as essentially a matter of lexical semantics, in that whether a noun phrase (NP) is definite or indefinite depends on the choice of determiner. It may be more accurate to say that the position of the determiners within phrase structure configurations may correlate with the definite/indefinite distinction. Definite and indefinite determiners occupy different positions in the NP, and some constituent that is not lexically a definite determiner can induce definiteness in an NP by occupying the relevant position in it. With possessives, the filling of a particular structural position can produce definiteness where the lexico-semantic content of the expression involved is not enough by itself to do this. This is an example of how syntactic factors can interact with semantic considerations in the grammar of definiteness. (MSE)

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# PHRASE STRUCTURE, POSSESSIVES AND DEFINITENESS

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Definiteness and indefiniteness are usually seen as essentially a matter of lexical semantics, in that whether an NP is definite or indefinite depends on the choice of determiner. I want to suggest in this paper that there may be more to it than this - that the position of determiners (using this term as a non-theoretical convenience, neutral with respect to category status) within phrase structure configurations may correlate with the definite-indefinite distinction.[1] The idea is that definite and indefinite determiners occupy different positions in the NP, and that, furthermore, some constituent which is not lexically a definite determiner can induce definiteness in an NP by occupying the relevant position in it. The view is widely held that at LF indefinites are open, while definites are quantificational, a variable in N' (taking NP to be N") being bound by some specifier. My proposals amount to the idea that this structure is mirrored in the syntax, and thus run counter to the observation of Barwise and Cooper (1981: 201) that semantic distinctions between determiners have no syntactic correlates in NP structure. I use the term *specifier* standardly to denote, for English, the pre-head position daughter to NP, and my starting point is the claim that definite determiners occur in this position as members of the category Det, while indefinite determiners, which have been argued to be always cardinal, for instance by Löbner (1984), are generated as daughters to N' in what I shall call *modifier* position.

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[1] A first version of this paper was presented at the Fifth Groningen Round Table, 1984, and formed the basis of talks given at the Universities of Manchester and Essex in 1985. I am grateful for the many valuable comments made at each of these meetings. Author's address: Department of Modern Languages, University of Salford, Salford, M5 4WT.

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Notice first that many of the indefinite or weak determiners (such as *two, many, few*) can also occur in definite NPs, and always follow the definite Det (*the two/many/few men*), though some others, like *a*, cannot. I would claim that these expressions in themselves have nothing to do with indefiniteness, and that *the many* cannot be treated as a sort of compound definite determiner, as proposed by Keenan and Stavi (1986), since it is not a constituent. I take it to be uncontroversial that definite Dets occur in the specifier, and it has been widely accepted in work on NP structure that *two, many, few* occur within N'. In particular, two of the most substantial studies to date of NP phrase structure, Jackendoff (1977) and Selkirk (1977), give detailed arguments for such an analysis; see also Klein (to appear) for an adjectival treatment of cardinality terms. Jackendoff and Selkirk both assume that when these items are not preceded by a definite Det, it is best, for the sake of generality, to take them to be still in what I call modifier position. There is a possible problem for this analysis with the 'indefinite article' *a*, since this determiner is never preceded by a definite Det and in fact only occurs in indefinite NPs. But I believe this can be accounted for by a phonological constraint, for which there is considerable cross-linguistic support, to the effect that unstressed elements (such as *a* and *the*) can only occur phrase-initially; therefore whenever the specifier is filled, this blocks the occurrence of *a* in the following modifier position (or perhaps *a* is deleted - I leave open the precise mechanism by which *a* is prevented from appearing).

The reason that specifier position is restricted to definite determiners is that the specifier plays a special role in the interpretation of NPs. The N' contains a set expression, while the specifier is the position for expressions which impose a restriction relating to the domain of interpretation. Thus in a sentence like *the books are boring*, the intersection of the set of books and the set denoted by the VP must be non-null, and in addition must be identical to the set of books. Thus the definite Det in the specifier relates the set given by the intersection to the total set of books in the domain. An expression like *many* would not be expected to occur in specifier position because its lexical meaning does not correspond to such a restriction. It is true that *many* can have a quantificational reading in addition to the more usual cardinal one, as

pointed out by Milsark (1979: 199-205); thus *many books* can be understood as equivalent to *many of the books*, *many* relating the intersection of the N' set with the predicate to the total set of books in the domain. And, as Milsark observes, *many books* with this reading does not readily occur in existential sentences, and is thus aligned with definites. But I think Milsark's suggestion that there is a class of indefinite determiners, including numerals, for which this quantificational reading is not available, is mistaken. Milsark is tentative on this matter, but it seems clear that in a sentence such as *three students went hiking, the other two remaining behind*, the numeral *three* is understood quantificationally. It can be claimed, then, that all cardinal determiners have available an additional quantificational interpretation.[2] There are two possible ways of incorporating this fact into my analysis. The first is to say that when these determiners have the quantificational reading, they then occur in the specifier; this would make them definite, which is reasonable if resistance to occurring in existential sentences is taken as a central criterion for definiteness. The second approach, which I will adopt, is to assume that cardinals are always in modifier position, because they are not always quantificational. On this view, while the appearance of a determiner in specifier position necessarily correlates with a quantificational reading, the possibility is admitted of a determiner with a quantificational reading not being in the specifier; this seems acceptable given that such a reading is available, though perhaps rather marked, for any cardinal determiner. I will assume, then, that specifier position is limited to those determiners which are always quantificational. Expressions occurring within N' are either part of the set expression, or a predicate over the intersection (as in the case of cardinality terms). Thus, in *the three big houses are too expensive*, the adjective *big* forms part of the set expression of N', limiting the set to that of

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[2] The only determiner that cannot be quantificational is *a*, and I suggest this is simply because *a* is unstressed; in fact it has often been argued that *a* is the weak, reduced form of *one*. Now it is a fact (noted by Milsark) that quantificational and cardinal *many*, *some* do not behave identically with respect to stress; the determiner must be stressed (and thus have full, unreduced vowels) to get the quantificational reading. With this qualification added to the claim that all cardinals can be used quantificationally, the exceptional position of *a* follows automatically.

big houses rather than houses; the cardinality term *three*, also in N', is a predicate over the intersection of the set of big houses and the set of too expensive things; and the Det *the* in the specifier ensures that this intersection set is identical to the set of big houses.

Now, elements which contribute to the set expression by further delimiting the set denoted by the N (adjectives, etc.) normally occur within N', but it follows from my thesis that if such an expression were to occur in specifier position, it would have the effect of imposing a constraint relating to the domain comparable to that imposed by a definite Det such as *the*. In general such occurrences are not found, presumably because there are Dets available to serve the purpose and the proper place for a descriptive expression is in N'. But there is one important exception. In English, possessives and NPs in the genitive (I shall use the term *possessive* to cover both) occur in specifier position (*the/those/the teacher's/our three old books*). And NPs containing a possessive specifier must necessarily be understood as definite. Thus *John's books, a teacher's work* have the sense of *the books belonging to John, the work done by a teacher*, respectively, not *some books..., some work...* This is in spite of the absence of a definite Det; possessives are sometimes described as definite determiners, but this is valid only as an informal way of noting that NPs with a pre-head possessive are necessarily definite. The point is that possessives are not lexically definite; this is particularly clear with a phrase like *a teacher*, which makes *a teacher's work* (with genitive Case assignment) definite, equivalent to *the work of a teacher*. It might be argued that definiteness is inherent in the genitive affix *'s*, but this view would be hard to maintain in face of the fact that possessives can be clearly indefinite when predicative (as *Ann's* in *this book is Ann's - she writes her initials in all her books*). It is equally clear that the definiteness of NPs with possessive specifiers has nothing to do with the semantics of 'possession' (greatly simplifying the meaning of possessives); the suggestion that possession is somehow incompatible with indefiniteness in the thing possessed cannot be right, since there is no anomaly in the phrase *some books belonging to John*. I believe the explanation for the definiteness is syntactic, residing in the position of the possessive expression in the specifier.

Semantically, the way it works is as follows. In *John's books are boring*, the intersection of the set of books belonging to John with the set corresponding to *boring* must be identical with the set of books belonging to John. There are two important points to note here. First, the possessive, though not in N', forms part of the set expression. The only way to avoid this conclusion is to say that the truth value of the sentence depends on the intersection of three sets, the *books* set, the *boring* set and the set of John's possessions; but this would be to give possessives an interpretation very different from that of other 'definite determiners'. Second, the restriction imposed by the presence of the possessive in the specifier is the same as that imposed by *the*. Thus in the absence of a Det such as *most*, which, lexically, specifies the nature of the restriction, it is the restriction corresponding to *the* which holds; *the* is thus in some sense the basic, or unmarked, definite Det. So if English permitted the structure [NP*good* [N'*men*]], it would have the same interpretation as [NP *the* [N' *good men*]].

In the same way the interpretation of [NP Poss [N' N]] (which we do have in English) is the same as it would be for [NP *the* [N' Poss N]]. This latter is precisely the structure we get in some languages, for example Italian *il mio libro*, Spanish *el libro mío* (as well as *mi libro*), where the possessive is in a normal adjective position. It is significant that in Italian possessives can occur with the definite and the 'indefinite' article - *un mio libro* 'a book of mine', so it is clear that the presence of a possessive in pre-N position does not by itself compel a definite interpretation. On my analysis the difference between English and Italian is that in English the possessive is in specifier position while in Italian it is within N' in modifier position; thus in Italian there is nothing to prevent the specifier being filled by the definite article. These two patterns are both widespread (as well as there being languages like Spanish combining both patterns), and I shall for convenience refer to a typological distinction, discussed in Lyons (1985), between DG ('determiner-genitive') and AG ('adjectival genitive') languages, a distinction which may reflect a parameter of phrase structure and lexical insertion. French and German are DG like English, while Portuguese and Greek are AG like Italian; notice that the distinction between genitive Case-marked NPs in languages that have them (English, German, Greek) and agree-

ment-marked possessives seems to have no bearing on the matter. It is important to note too that the question of whether or not a language has a definite article seems not to be relevant. Russian has no definite article, and is DG; *moja kniga* 'my book' can only be understood as definite. On the other hand, according to Huang (1984), Chinese, which also lacks a definite article, is AG; the corresponding phrase can be understood as 'my book' or 'a book of mine'. In AG languages, as noted, the same construction is used for both definite and indefinite, but in DG languages, since a possessive specifier forces a definite interpretation, a different construction has to be used to get the indefinite sense, and the typical pattern is to use a PP complement: French *un livre à moi*, German *ein Buch von mir*, English *a book of mine* (the structure of which is discussed in Lyons 1986). This PP construction has the effect of placing the possessive expression within N'.

The central point of this discussion is that there is nothing in the meaning of possessives to induce definiteness in the NP, and that for this reason a possessive occurring in modifier position does not do so; it simply behaves like any adjectival element, contributing to the set expression. Only when a possessive occurs in the specifier must the NP be interpreted as definite; in this case, the possessive phrase has the same effect as would the Det *the* in this position, while still contributing its lexical content to the set expression in N'.

This treatment has interesting consequences for (in)definiteness generally. First, since the mere filling of the specifier induces definiteness, it follows that indefinite NPs differ syntactically from definites in having empty specifiers, a claim which finds support from the many languages in which there is no 'indefinite article' and absence of a determiner marks an NP as indefinite (for example Chamorro, Irish, Classical Greek). Whether we can go further and say that indefinites have no specifier, because no N" node, thus being non-maximal projections, is a question that I will not pursue here; but such a view would be close to the proposals of Rothstein and Reed (1985), arising from other considerations. Second, as observed above, the contribution to the NP interpretation made by the definite article *the* is a 'default' value for definite NPs - an expression which is not lexically definite can make

the same contribution, by simply occupying specifier position; see also Higginbotham (1983: 416). Barwise and Cooper (1981) do not give an analysis of demonstratives, but say that these should turn out to be definite, a view with intuitive appeal and generally assumed to be correct. But if their definiteness consists of the same constraint as holds with *the*, and this constraint is a default value, applying when anything which is not a definite Det appears in specifier position, perhaps they need not be lexically specified as definite. Let us suppose that they are not, but that 'demonstrativeness', by contrast with 'possession', is semantically incompatible with indefiniteness, so that an indefinite NP containing a demonstrative expression would be anomalous; in fact such NPs seem not to occur. Now, it follows from this supposition that any NP containing a demonstrative must have its specifier filled; and indeed, in English and many other languages, the demonstrative itself occupies specifier position. But since, as I am supposing, demonstratives are not lexically definite, it should be possible for them to occur elsewhere in the NP, as long as something appears in the specifier. And in fact in many languages (including Spanish, Arabic), demonstratives either must or can occur in modifier position, but the equivalent of *the* then appears in the specifier (Spanish *este libro* or *el libro este* 'this book').

In conclusion, I have considered one aspect of how syntactic factors can interact with semantic considerations in the grammar of definiteness. I have tried to show on the basis of the possessive facts that the filling of a particular structural position can produce definiteness where the lexico-semantic content of the expression involved is not enough by itself to do this.

## REFERENCES

Barwise, J. and R. Cooper. 1981. Generalized quantifiers and natural language. *Linguistics and Philosophy* 4.159-219.

Higginbotham, J. 1983. Logical form, binding, and nominals. *Linguistic Inquiry* 14.395-420.

Huang, C.T.J. 1984. *Definiteness effects in Chinese*, paper presented at the Fifth Groningen Round Table, Groningen, June 1984.

Jackendoff, R. 1977. *X̄ Syntax. A Study of Phrase Structure*. Cambridge, Mass.: MIT Press.

Keenan, E.L. and J. Stavi. 1986. A semantic characterization of natural language determiners. *Linguistics and Philosophy* 9.253-326.

Klein, E. to appear. Determiners and the category Q. *Linguistics*.

Löbner, S. 1984. *Indefinite determiners are cardinality predicates*. Paper presented at the Fifth Groningen Round Table, Groningen, June 1984.

Lyons, C. 1985. A possessive parameter. *Sheffield Working Papers in Language and Linguistics* 2.98-104.

Lyons, C. 1986. The syntax of English genitive constructions. *Journal of Linguistics* 22.123-143.

Milsark, G.L. 1979. *Existential Sentences in English*. New York: Garland.

Rothstein, S. and A. Reed. 1985. *Definiteness and set determination*. ms.

Selkirk, E.O. 1977. Remarks on noun phrase structure. In Culicover, P.W., T. Wasow and A. Akmajian. eds. *Formal Syntax*. New York: Academic Press.